



# TOWER

THE MAGAZINE  
FOR ALUMNI AND  
FRIENDS OF UTS

SPRING 2019 | ISSUE 19



# 10

## Alumni Awards 2019

Meet the inspiring UTS alumni whose creativity, determination and game-changing achievements have been recognised this year

# Contents

03

Welcome

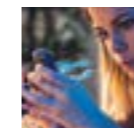


09

Midwife on a mission

26

World class



32

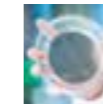
Building for tomorrow

04

News in brief

22

Ahead of the game



28

The cell separator

33

Entrepreneurs for good

07

5 questions with Professor Peter Scott

24

The power of values-driven leadership

30

The gift of a safer society

34

Network like a natural



08

A place of belonging

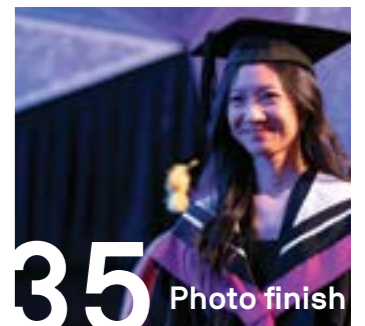
25

Determined to learn



31

Tall tales from a UTS giant



35 Photo finish

## MORE WAYS TO STAY CONNECTED

As a UTS graduate, you're part of a global network of professionals. Stay connected with the latest events and opportunities at [alumni.uts.edu.au](http://alumni.uts.edu.au) and make sure your details are up to date!

**Become a friend on Facebook:**  
[facebook.com/UTSAlumni](https://facebook.com/UTSAlumni)

**Sign up to our Twitter feed:**  
[twitter.com/UTSAlumni](https://twitter.com/UTSAlumni)

**Join our LinkedIn group:**  
UTS Alumni (Official)

**Follow us on Instagram:**  
[@UTSAlumni](https://www.instagram.com/UTSAlumni)

Tower Magazine is published for alumni and friends of the University of Technology Sydney (UTS). The views expressed are not necessarily those of the university. Tower Magazine is produced by UTS Advancement office. P +61 2 9514 9861 F +61 2 9514 9872 E [alumni@uts.edu.au](mailto:alumni@uts.edu.au)

### UTS ADVANCEMENT

**Vice President of Advancement:** Celia Hurley

**Editor:** Karen Penning

**Contributors:** Vice-Chancellor Attila Brungs, Dani Cooper, Janine Cooper, Candy Jenkins, Jennifer Kiely, Felicity Kitson, Michael McDaniel, Emma Mulholland, Mujibar Rahman, Violet Roumeliotis, Peter Scott, Kat Shaw

### PUBLISHED BY MAHLAB

**Mahlab**

369a Darling Street, Balmain NSW 2041  
P: +61 2 9556 9100

E: [inquiries@mahlab.co](mailto:inquiries@mahlab.co)

W: [mahlab.co](http://mahlab.co)

**Managing Director:** Bobbi Mahlab

**Account Manager:** Lindzee Whiting

**Editorial Liaison:** Ruth Cooper

**Creative Direction:** Gareth Allsopp



This product is from sustainably managed forest and controlled sources. Recognised in Australia through the Australian Forestry Standard.

©This publication is copyright. Apart from any fair dealings for the purposes of private study, research, criticism or review as permitted under the Copyright Act 1968, no part may be reproduced by any process without written permission. Enquiries should be addressed to UTS. While all reasonable attempts at factual accuracy have been made, Mahlab and UTS accept no responsibility for any errors contained in this publication.

Printed by Webstar. UTS CRICOS PROVIDER CODE: 00099F

# A lifelong connection

Wherever your life and career take you, by staying connected to UTS you'll have access to a range of exclusive opportunities and benefits.



- 1 Build your professional networks**  
 You're part of a vibrant global community of UTS graduates — that's an impressive network! Connect with other inspiring professionals and UTS thought leaders at exclusive events held locally and internationally.
- 2 Refresh your skills in a changing world**  
 You get a 10% discount on all UTS degrees and short courses — a great reason to keep learning and updating your skills throughout your career.
- 3 Be the first to hear how we're breaking new ground**  
 Stay up-to-date on our research breakthroughs and social justice projects and the extraordinary career journeys of your fellow graduates. From the Ultimo campus to far beyond, wherever UTS is having an impact, you'll be the first to know.

## Connect with us!



Follow UTS Alumni (Official) on LinkedIn and UTS Alumni on Facebook, Instagram and Twitter.



**Our alumni are a source of pride and inspiration for me and the broader UTS community. Now numbering over 225,000, our graduates are working in every corner of the globe and making an impact in every field of human endeavour.**

In this edition, you can read about the achievements of 11 extraordinary alumni whose creativity, innovation and determination have made them game changers in their industries. They have been selected from over 60 nominees as our 2019 Alumni Award winners. I encourage you to read their remarkable stories on pages 10–21.

This year the university launched its next long-term strategy, UTS 2027. With an ambitious vision to be a leading public university of technology recognised for our global impact, we're building on our strengths

to ensure that we are in the best position to respond to the changing needs of learners, industry and our community.

Now more than ever, UTS is committed to personalised learning experiences that prepare and support our graduates to succeed in the future workforce, driving innovation and entrepreneurship, supporting open and rigorous public debate and delivering excellent, impactful research.

As alumni, you're a vital part of the UTS community and a key factor in our ongoing success. As we transform the entire university to focus on a lifetime of learning, our commitment is to support the professional development of our students and graduates throughout their whole career and lives.

Whether you are a recent graduate or already progressing in your career, think of UTS as your lifetime learning partner, helping

you with your future career or workplace needs and collaborating with you to address the complex challenges facing the world. We are dramatically expanding and changing our education offerings and already partnering with businesses to deliver learning in the workplace.

While many of you contributed directly to our UTS 2027 strategy, we would always be delighted to hear directly from you about how UTS can support you in the months and years ahead.

The future is looking incredibly bright for UTS, its students, alumni and the communities we seek to serve and strengthen. Earlier this year, for the fifth year in a row, UTS was named Australia's number one young university by the Times Higher Education Young University Rankings. This year we also jumped 20 places to 140th in the world in the QS World University Rankings. More importantly, when it comes to research impact and quality, we're leading the country. The Australian Research Council's recent Engagement and Impact Assessment ranked UTS as number one for research impact.

These results speak to the quality of our teaching, learning and student experience, the future-focused design of our courses and the life-changing impact of our research. Thank you for being an integral part of these stellar results. I hope you will stay connected with UTS and your global community of game-changing alumni.

**Professor Attila Brungs**  
Vice-Chancellor and President



PHOTOGRAPHS BY ANDY ROBERTS



## NEWS IN BRIEF

# UTS Central opens its doors

UTS Central made its long-awaited debut on Broadway in August, opening its doors to staff, students and the public.

Located between the Tower building and the Faculty of Engineering and IT, UTS Central is the final major capital development project delivered as part of the UTS City Campus Master Plan.

Students and staff can now access collaborative learning classrooms and the food court, which is also open to the public. Over the coming months, more spaces will be unveiled, including the new UTS Blake Library, the stunning UTS Reading Room and the Hive SuperLab.

The library, spanning levels 7 to 9, is set to become the heart of the Ultimo campus when it opens in late

2019. It will be an inspiring space for a lifetime of learning, with study and exhibition spaces, sweeping outdoor terraces and an electronic retrieval system reaching beneath the Alumni Green.

The UTS Reading Room, with its light-filled, triple-height atrium overlooking the Alumni Green, will also open in late 2019 and will be accessible to all who wish to read, research, collaborate and reflect.

The stunning handcrafted chairs that will furnish the Reading Room were designed by UTS alum and award-winning designer Adam Goodrum.

Find out more about these spaces, the building design and what's to come at [utscentral.uts.edu.au](https://utscentral.uts.edu.au)



## Bob Carr steps into business and climate change role at UTS

Former foreign minister and NSW's longest-serving premier, Bob Carr, will help tackle climate change in his new job as an industry professor at UTS.

Professor Carr served as Premier of NSW between 1995 and 2005, during which time his government partnered with the energy sector to develop the world's first carbon trading scheme.

It also introduced controls on land clearing that were instrumental in Australia reaching its Kyoto targets; reformed water and energy use and sewerage; and created 350 new national parks under Australia's first Wilderness Act.

Carr's new three-year role will be based jointly in the Institute for Sustainable Futures and the UTS Business School. It follows his successful five-year term leading the Australia-China Relations Institute at UTS.

## UTS powers ahead in rankings

UTS has again been named the number one young university in Australia by two major rankings systems: the Times Higher Education (THE) Young University Rankings and the QS World University Rankings Top 50 under 50.

Worldwide, the university sits at 13th place in the THE ranking, moving up three spots from last year and closing in on the Top 10.

UTS has also jumped 20 places in the QS World University Rankings, and is now listed as the world's 140th best university. It maintained ninth position among Australian universities.

In the latest QS assessment, UTS ranked highest for employer reputation, reflecting the focus on preparing graduates for the fast-changing workforce. UTS's rise in ranking was also driven by improvements in academic reputation and citations per faculty.



## Innovative UTS podcast wins prestigious award

The History Lab podcast, produced by UTS's Australian Centre for Public History in collaboration with community radio station 2SER, was named Silver Radio Winner at the 2019 New York Festivals Radio Awards.

History Lab is Australia's first investigative history podcast, exploring the gaps between the present and the past and drawing listeners into the thrill of historical research.

"It's about making history for your ears that is accessible, well-researched and entertaining," says co-creator Dr Tamson Pietsch.

"We are proud of our ongoing commitment to doing history in public. Audio provides an intimate and innovative medium to reach new audiences and share the work of the university."

With two hit seasons under its belt, the team behind the podcast is about to commence production of a third season.

## UTS takes gold at RoboCup 2019

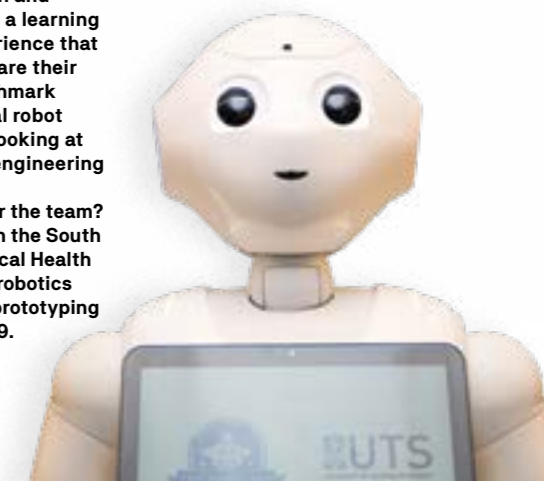
With a polite robot named Pepper by their side, a team of robotics researchers from UTS were awarded a gold medal at this year's RoboCup held in Sydney.

The artificial intelligence developed for the competition was the culmination of a three-year project, led by Distinguished Professor Mary-Anne Williams.

UTS was one of six teams exploring technologies to program a humanoid robot, supplied by Softbank Robotics. Over four days, the team achieved high scores across all activities designed to test characteristics in several social settings.

Beyond the fun and games, RoboCup is a learning and teaching experience that allows teams to share their research and benchmark their creative social robot behaviours, while looking at new and complex engineering and IT problems.

What's next for the team? A collaboration with the South Western Sydney Local Health District on various robotics applications, with prototyping to begin in late 2019.



Follow [UTSAlumni on Facebook](https://www.facebook.com/UTSAlumni) for all the latest news



# Your kindness in action

**Thank you to all the caring alumni and friends of UTS who supported students in need this year.**

Your generosity has helped hundreds of students like Brooke to overcome disadvantage and hardship and start a life-changing degree.

“I want to say a huge thank you to the donors who have supported me and so many other Indigenous students. We wouldn’t be here without the financial support and scholarships available at UTS,” says Brooke.

Gifts from compassionate people like you empower Indigenous and disadvantaged Australians to get to university, realise their potential, and light a new path for their families and communities.

Thank you so much for changing the lives of students in need — we couldn’t do it without you!



**Haven’t had a chance to make a gift yet?**

**There’s still time. Head to [giving.uts.edu.au/appeal](http://giving.uts.edu.au/appeal) to make a game-changing difference to students like Brooke.**



# 5

## questions with Professor Peter Scott

**From digging around in tunnels for a school geography project to shaping postgraduate experiences, UTS’s Pro Vice-Chancellor (Education) shares his passion for learning — and where he sees it heading.**

**Can you tell us about your educational journey?**

I went to a comprehensive school in the UK filled with the children of farmers and factory workers. I enjoyed school a lot. I went on to study psychology at Warwick University, which was seen as a strange thing to do. Neither of my parents went to university and I was the only one of my five siblings to go.

I did a PhD in psychology at Sheffield University, looking at learning and learning systems, and then became a lecturer. After 10 years at Sheffield, I moved to the Open University in the UK and was involved in some fun and unusual projects, including working with a team that measured gravity around an active Nicaraguan volcano. I was also involved in exciting virtual projects such as launching Apple’s iTunes University app in Europe, and working with my team to turn university textbooks into interactive iBooks.

**Who was your favourite teacher and why?**

My love of research came from my high school geography teacher Mr Plum, who was a passionate researcher. One of my school projects was to map underground land use to see if overground models were echoed underground. Those were the days before GPS

and smartphones, so I dug around in basements, wrote it all up and developed maps.

Another favourite was my Russian teacher, Mr Smith (*Gospodin Smit* in Russian). He taught me that — like the Russian language — most challenges in life are puzzles. Cracking the puzzle is fun and really cool.

**How is technology changing the future of work and learning?**

Technology is moving very fast and changing how we can do things. And as skills become more complicated, being able to work as part of a team is critical. At UTS, we help you master technology so you can tackle the disruption we’re facing and do the ethical thing. We’ll also help you manage a team or be a valuable member of a team, which is vital for the 21st century.

**What goes into creating the best postgraduate study experience?**

You want to be able to learn in the way that suits you. That’s why UTS is increasing the flexibility of our study and curriculum with offerings such as micro credentials, UTS Open and stacked degrees. Postgraduate study is also about creatively engaging with your problem, rather than sitting back and letting someone explain it to you. The answer is rarely in Google or someone else. The answer is in you and how you can change along with our changing world.

**What would you say to UTS graduates who are thinking about further study?**

Come back and engage with us. If you’re interested in what’s changing in the world of work and solving problems for the future you, UTS is the place to be.

To learn more about postgraduate study at UTS, visit [uts.edu.au/future-students/postgraduate](http://uts.edu.au/future-students/postgraduate)

# A place of belonging

**Michael McDaniel and school didn't get along. But, at the age of 24, an Indigenous pathways program into university changed everything. Today, he is UTS's Pro Vice-Chancellor (Indigenous Leadership and Engagement) and the 2019 NAIDOC Scholar of the Year. Here, McDaniel describes his journey to back to education, and how UTS's plan to build Australia's first Indigenous Residential College will be a game changer for Indigenous students — and the nation.**

I left school at the age of 14. Like many Aboriginal young people, I'd had an unpleasant experience.

I did a number of short-term jobs; I was in the army for six years, I was a security guard, I had a job sorting mail by night for the National Australia Bank.

Then I saw an advertisement for a university offering bridging programs to Aboriginal and Torres

Strait Islander people. There was nothing in my track record to suggest I'd succeed — I wasn't very studious at school and had probably written only four or five letters while I was in the army. I also wasn't aware of any other person in my family who had been to university. But I thought I'd give it a go. And that bridging course completely changed my life.

You've got to understand, university isn't part of the experience of many Aboriginal families. That's why we have to raise the aspiration of young people and help them understand how higher education can lead to a life of meaningful work and contribution to society.

While there are an increasing number of Indigenous students who are thriving in the education system, the reality is, many Indigenous students don't obtain marks at the same level as their non-Indigenous peers, even when they do finish Year 12. It's not that they're not intelligent and not keen, but life circumstances tend to create an environment that's not conducive to successful study.

The other challenge for Indigenous people is accommodation, particularly if they're living in a rural or remote region. Imagine you're a student living in a small country town. The thought of moving away from home and community, and the questions of where you might live and how you might pay for your accommodation, may deter you from taking up a university offer. So why put yourself in that situation?

That's why we need to break new ground. What we're proposing is the establishment of Australia's first Indigenous Residential College.

It will be a world-class facility with approximately 250 beds for Indigenous and non-Indigenous students. Indigenous students will be offered cost-covered accommodation, as we're doing at the moment at our Wattle Lane residence, and provided a stipend to support their living costs.

We'll also continue to provide tutoring support through Jumbunna — a dedicated unit at UTS that supports the academic, social, cultural and emotional wellbeing of Aboriginal and Torres Strait Islander students.

The Indigenous Residential College is not an equity initiative. This is an excellence initiative. And it's a new way of approaching Indigenous education. For the first time in history, Aboriginal and Torres Strait Islander people will be able to choose a college that has a celebration of their own identity, culture and traditions at its heart. 🗨️

Visit [indigenouscollege.uts.edu.au](http://indigenouscollege.uts.edu.au) to learn more about UTS's vision for the game-changing Indigenous Residential College.



PHOTOGRAPH BY SISSY REYES



## Midwife on a mission

With the support of UTS alumni, Candace Dower is blazing a trail as a young Indigenous midwife.

Candace Dower dreamed of becoming a midwife and helping other young Indigenous mothers.

But she had two small children to support and couldn't afford to give up her job working with Indigenous children at a youth centre. As the first in her family to finish Year 12, Dower also hadn't grown up with the idea of university as a path she could take.

"I've never had anyone who could show me where to go. I've just had to do it," she says.

With the support of the UTS community and the Jumbunna Institute for Indigenous Education and Research, Dower found a pathway to her midwifery degree, financial assistance and extra tutoring.

"When I started, it was very daunting. Jumbunna and UTS helped me massively. They've given me confidence and shown that people believe in me," she says.

Dower's story is proof of the positive change that is created through investment in Indigenous education.

"Studying at UTS has really impacted my life. I'm showing my family and my community, especially the young kids, that I can do it."

Today, Dower is the first Indigenous midwife to do a placement at Sydney's Royal Prince Alfred Hospital.

She loves sharing her story with the Indigenous children she still works with part time.

"It's amazing to inspire them. I've got a couple of the young girls asking me what I do and how I do it. I share my experience with them and they say, 'Oh, that's what I want to do!'"

Dower is now looking to her big dream: to open an antenatal clinic run by Indigenous midwives after she graduates.

To donate to the Change Starts by Degree appeal, visit [giving.uts.edu.au](http://giving.uts.edu.au)



Artist's impression of the Indigenous Residential College by BVN.

# Alumni Awards 2019

Meet this year's Alumni Award winners: passionate, innovative and inspiring UTS graduates who are making a difference in Australia and around the world.

WORDS BY EMMA MULHOLLAND



## PROFESSOR MARIA KAVALLARIS AM

### SCIENCE AWARD UTS CHANCELLOR'S AWARD FOR EXCELLENCE

**UTS DEGREE**  
Bachelor of Applied Science (Biomedical), 1989

**CURRENT POSITIONS**  
Director, Australian Centre for NanoMedicine  
Professor and Head of Tumour Biology and Targeting program, Children's Cancer Institute

**ROLE MODEL**  
Professor Susan Band Horwitz, the biochemist behind cancer drug Taxol

**SECRET SKILL**  
Underwater photography. "It's always been a hobby. When I'm in my eighties, they're going to have to cart me to the water in a wheelchair."

## Tackling cancer with nanotech

**The problem with chemotherapy and other cancer treatments, says Professor Maria Kavallaris AM, is that they're a kind of "bucket chemistry" – effective, but imprecise.**

"The drugs are toxic, that's why they work on cancer," she says. "Cancer cells tend to be more rapidly dividing and more vulnerable to being killed but, as a consequence, normal cells that also need to divide regularly get badly damaged too."

For patients, this means hair loss, a suppressed immune system and, possibly, lifelong side effects.

Kavallaris has personal experience of this 'collateral damage', having been diagnosed with cancer at 21. Not one to give up, she juggled treatment with her undergraduate studies and work as a laboratory technician at the Children's Cancer Institute.

Some 35 years later, she remains at the institute, where she oversees a team of 24 researchers and works on a range of projects, from looking at the causes of tumour growth to drug resistance.

An expert in cancer nanomedicine, Kavallaris has also been investigating new delivery methods for anti-cancer

treatments, including drugs that would directly target tumour cells, sparing healthy ones. Her work so far has attracted an incredible \$45 million in funding.

But Kavallaris is most proud of co-founding the Australian Centre for NanoMedicine in 2011. Since then, the interdisciplinary team has grown to more than 130 chemists, engineers, scientists, oncologists and clinicians, and has changed the way this kind of work is done in Australia.

"At the time, engineers and chemists were creating these clever things then saying to us, 'Oh, we think you could use it for cancer,'" she says. Her team would run tests but the product often didn't satisfy basic standards, such as toxicity testing.

"It's not because they hadn't created something fantastic," says Kavallaris, "but because they were designing things then saying to us, 'Can you fit it in your system?' Our vision was to tackle nanomedicine from a disease perspective: to start with the problem and work backwards."

### Q & A

**What's been one of the biggest challenges of your career?**

Early on, a lot of people still saw me as a laboratory technician, rather than someone who'd finished a PhD. In the end, I realised I just had to prove to myself that I was capable.

**Are you seeing more women in the field these days?**

It's getting better but we still have a long way to go. I chair international conferences and we aim for 50 per cent representation; sometimes we reach it, sometimes we don't.

**What advice do you have for science graduates?**

When you're doing research, you have to anticipate that 95 per cent of what you do is not going to work out the way you thought it would. Some of the work I'm doing now, I started in my postdoc studies 23 years ago. You've got to have vision and love problem-solving.



## BROOKE BONEY

### INDIGENOUS AUSTRALIAN AWARD

#### UTS DEGREE

Bachelor of Communication (Journalism), 2014

#### CURRENT POSITION

Entertainment reporter on Nine Network's *Today* show

#### ROLE MODELS

Journalist Stan Grant, Senator Malarndirri McCarthy, AFL General Manager of Inclusion and Social Policy Tanya Hosch, and writer Auntie Jackie Huggins.

#### SECRET SKILL

"I can eat a meat pie with one hand without spilling any. It comes from years of going to Swans games."

## Brand new day

Earlier this year, journalist Brooke Boney swapped the cutthroat world of news and politics for the cutthroat world of breakfast TV. Just days into her new job as *Today's* entertainment reporter, she was asked for her thoughts on *Change the Date*, a campaign to move Australia Day from the date of the First Fleet's arrival in Sydney.

All smiles, Boney cut to the chase. "This is the best country in the world, no doubt," she said. "But I can't separate the 26th of January from the fact that my brothers are more likely to go to jail than they are to go to school, or that my little sisters and my mum are more likely to be beaten and raped than anyone else's sisters and mum, and that started from that day."

The backlash was fierce and Boney, a Gamilaroi Gomeroi woman, admits it was hard to take. "When you say something that's important and heartfelt, you want people to really hear you. That was the difficult part: realising that you don't have a lot of control over the narrative once it's out there, in the world."

Still, she's embraced the chance to speak to a mass audience, even if that audience is vastly different to those who tuned in to Triple J, NITV, SBS and the ABC, where she previously held roles as a news presenter and political correspondent. It's part of what drew her to study journalism — the chance to be part of the conversation, rather than reading about it.

But getting a seat at the table wasn't easy for Boney, the first in her family to go to university. "If you haven't seen it done before, you don't think of university as being an institution for you," she says.

A spokesperson for the GO Foundation, which creates opportunities for Indigenous youth through education, Boney encourages others to follow her lead. "Once Indigenous kids get through post-secondary education, we actually do better," she says. "But we need to be able to imagine it."

## Q & A

**You're the first Indigenous person on commercial breakfast TV. Do you feel the pressure of that?**

Yes, for a couple of reasons. I want to do justice to all the people who've supported me, and to be the best possible advocate and representative from the community, but without trying to speak on behalf of everyone.

**What are you most proud of?**

I always stand up for what I believe in, whether that's pointing out an editorial decision that goes against my values or saying to a colleague, "Actually, when you say that, it makes me feel really uncomfortable." It takes a lot — I have to rally to do it — because I know it's sometimes difficult for people to hear.

**How do you deal with critics?**

I focus on the people who've helped me along the way. If you get caught up thinking about how many people don't want you to succeed or are standing in your way, you fail to see that there are so many who'll give you a chance or are barracking for you.



## DR ASHOD DONIKIAN

### ENGINEERING AND INFORMATION TECHNOLOGY AWARD

#### UTS DEGREES

PhD Engineering, 2010  
Graduate Certificate in Research Commercialisation, 2008  
Bachelor of Engineering (Electrical), 2003

#### CURRENT POSITION

Founder and CEO, Navisens

#### ROLE MODELS

"I owe a lot to my parents, especially my mum. She's like my invisible co-founder."

#### SECRET SKILL

"Grit and determination."

## Next-gen GPS

GPS plays a central role in modern life, but the technology — developed in the 1960s for military use — isn't really suited to the age of the smartphone, argues robotics engineer Dr Ashod Donikian.

"It wasn't built for using indoors or in dense city areas," he says, "and it has a very low power signal because it's meant to be invisible to enemies."

For his PhD, Donikian tasked himself with inventing a location-tracking system that would not only work inside, but could be used to find firefighters in a burning building.

The best sensor, he decided, is the one in your pocket: your smartphone. Using machine-learning algorithms, he created a technology that harnesses a device's inbuilt accelerometers and gyroscopes to provide a 3D-navigation tool. It's location and motion mapping without the need for Wi-Fi, Bluetooth or GPS.

Upon receiving his PhD, Donikian took his life-saving tech to Silicon Valley.

"It was clear no-one cared about the firefighter example," he says. "They'd say, 'Are you crazy? Google needs this, Apple needs this, Uber needs this.'"

At the time, Donikian was sleeping in his car and pitching to anyone who would listen. First responders, it turns out, aren't early adopters.

"Once we're trusted by the commercial market, we can go into this smaller, adjacent one," he says.

Today, Donikian's company, Navisens, employs nine engineers and licenses the technology to app developers who require location tracking, be it for maps, ride-sharing services or delivering goods.

While the company is still at startup stage, Donikian is in talks with some major tech companies — but until there's a deal in place for his game-changing location platform, he's keeping that information close to his chest.

## Q & A

**What's the hardest part of running a tech startup?**

It's challenging day in, day out. Part of the excitement is that anything can happen, but that's also part of the uncertainty. One week, you might be doing something with the most valuable companies in the world; another week, you might be struggling to get customers.

**How do you deal with that uncertainty?**

I just do it. I think people think about things too much. If I thought about everything I'd have to do once I moved here to Silicon Valley — hire engineers, raise money, incorporate a company and find my first customers — then I never would have gotten started.

**What advice do you have for engineering students?**

Really think about your undergraduate thesis. As an employer, I've looked at thousands of CVs and seeing what a graduate did for their thesis tells you a lot about what they're interested in, and whether they pushed themselves.





**ANNETTE DAILEY**  
YOUNG ALUMNI AWARD

**UTS DEGREES**  
Bachelor of Engineering (Civil and Environmental), 2008  
Diploma in Professional Engineering Practice, 2008

**CURRENT POSITION**  
Executive Director – Operations and Communications, Australian Space Agency

**ROLE MODEL**  
Roger Franzen, engineering manager for Australia’s FedSat satellite

**SECRET SKILL**  
“I’m a very good negotiator, particularly around money.”

## Making space

At 36, Annette Dailey has what she considers to be one of the best jobs in the world: Executive Director at the Australian Space Agency.

As a senior leader at the agency, she and her colleagues are working to grow the local space industry. And they have big plans. First up, there’s the construction of a space discovery centre in Adelaide, plus Australia’s first mission control. In time, Annette plans to partner with the commercial sector to get Australian rockets taking off from Australian launching pads.

But one of her primary goals is to convince the Australian public that space is worth investing in.

“People don’t realise that it affects almost every part of our lives,” she says. “I guarantee that I could tell most people how space applies to their job. It’s essential to everything from banking to monitoring water flow and helping farmers do better cropping.”

Dailey’s love of all things space-related dates back to her teen years,

when she attended space camps and idolised Australian astronaut and engineer Dr Andy Thomas AO.

As a graduate, Dailey took up policy roles that utilised her environmental engineering skills, from running a wild dog abatement program to assisting with the Cyclone Yasi recovery effort.

Now that she has her dream job, Dailey wants more women to join her in the space sector. She’s proud of the fact her agency’s leadership team is 50 per cent female — a drastic change from the early days of her career.

“I remember going to my first space industry board meeting and everyone there was a man over the age of 45,” she says. “When I was about 30, I realised why I’d been struggling to create a career path: it was because I just couldn’t see myself reflected in the leadership at the time.”

### Q & A

**You’ve worked hard to promote STEM careers. Are you seeing changes on that front?**

Actually, I’m worried we’re going backwards. Because maths and science are no longer compulsory all the way through school, kids don’t get those skills early enough. My personal goal is to get mums and dads talking about STEM careers around the dinner table.

**What advice do you have for engineering graduates?**

Get lots of experience across the board before you specialise.

**What’s been one of the biggest challenges of your career?**

Finding that work/life balance. At the Australian Space Agency, we’re very focused on the fact that we all have cool jobs, but we have families, too. If our people aren’t seeing their loved ones, then we’re not going to get the best out of them. I actually feel like I’ve got the best of both worlds right now.



**ANNABELLE SHEEHAN**  
ARTS AND SOCIAL SCIENCES AWARD

**UTS DEGREE**  
Bachelor of Communication (Film Production and Film Studies), 1981

**CURRENT POSITION**  
CEO, New Zealand Film Commission

**ROLE MODELS**  
“People I worked with in the ‘80s and ‘90s, including directors George Miller and Jane Campion, producers Doug Mitchell and Jan Chapman, and editor Lee Smith.”

**SECRET SKILL**  
“I used to play violin in an all-girl punk band called Friction while I was at UTS.”

## Calling the shots

A film buff from an early age, Annabelle Sheehan was raised on whatever gems free-to-air TV had to offer in the 1970s — mostly relics from Hollywood’s golden age, featuring the likes of Fred Astaire, Cary Grant and Shirley Temple.

“I used to say a misspent youth is the best way you can prepare for a film career,” she laughs.

After graduating from UTS, Sheehan went into post-production, working on films such as *Mad Max 2*, *Dead Calm* and *The Piano*. Next, she took up academic roles, serving as a department head at the Australian Film Television and Radio School. Then she reinvented herself once more, this time as a talent agent, representing Cate Blanchett and Ben Mendelsohn as CEO of RGM Artist Group.

“My interest in film was never just about making films, but in thinking about them,” she says of her diverse career. “UTS taught me to look at the industry from a big, broad perspective. It was strong on analysing social structures, feminism and communications theory — things I still think about today.”

In 2018, after serving as CEO of the South Australian Film Corporation, Sheehan took on her current role: CEO of the New Zealand Film Commission. Over the next year, she’s determined to boost gender equality and get more Māori stories on the big screen.

Sheehan is known for her pragmatism — a product, she says, of a decade in the fast-paced world of a talent agency. “I’m interested in processes, that goes back to my communications degree, but we also have to ensure things happen,” she says.

“We have to spend money, encourage filmmakers, and partner with the people for whom it really matters.”

### Q & A

**What’s been a highlight of your career?**

Being a talent agent was fantastic. I worked with some wonderful writers, directors and actors, and when they’re having great success, you feel really privileged to be part of that.

**What’s it like to operate in such a male-dominated field?**

I’ve had some great male mentors, as well as women. But as a leader, I’ve noticed that women have a very narrow band of acceptable behaviour; to influence and impact, while maintaining respect, we have to tread carefully.

**And what have you been watching lately?**

*Come to Daddy* and *Hotel Mumbai* — two very different films!



## SARAH DALE LAW AWARD

**UTS DEGREE**  
Bachelor of Laws, 2011

**CURRENT POSITION**  
Principal Solicitor, Refugee Advice and Casework Service (RACS)

**ROLE MODELS**  
“The team at RACS. Everyone comes here every day to fight for the rights of others. To me, that’s incredibly inspiring.”

**SECRET SKILL**  
Switching off. “My husband will say to me, ‘You’ve had an enormous day at work, you don’t need to make a three-hour curry.’ But I do need that: it returns me to the normal world.”

## Freedom fighter

**Asked what she considers the biggest achievement of her career, solicitor Sarah Dale describes the situation facing more than 20 unaccompanied teenage asylum seekers on Christmas Island in 2014.**

“For 18 months, they’d wake up every morning, dreading that this would be the day they’d be transferred to Nauru,” she says. “We were told by very senior lawyers and senior counsel that there was nothing we could do, but we decided there had to be an alternative.”

Dale’s organisation, Refugee Advice and Casework Service (RACS), made a complaint to the United Nations — a bold move by the then 27-year-old, who’d been admitted as a lawyer just two years earlier.

But Dale was no stranger to tough cases, having spent her graduate years representing juvenile offenders. In the end, the teens on Christmas Island were released into the community to start the process of applying for protection in Australia.

“We’ll never know exactly why, but I think it was a mix of public and legal advocacy,” says Dale.

As for her biggest challenge, Dale points to 2017, when it was announced that asylum seekers who had arrived by boat after August 2012 had just five months left to lodge a visa application.

Many had only recently been invited to apply, and the small team at RACS already had a waitlist in the thousands. It was an intense but rewarding five months for Dale, who was charged with coordinating the legal team.

“We had to rally together with many of Sydney’s top-tier law firms; we had volunteers by the hundreds,” she says. “Remarkably, despite the fact there were close to 28,000 people needing help, only 77 missed the deadline.”



## BRENDAN LONERGAN COMMUNITY AWARD

**UTS DEGREE**  
Master of Business (Marketing), 2006

**CURRENT POSITION**  
CEO, Beehive Industries

**ROLE MODELS**  
Ronni Kahn, CEO and founder of OzHarvest, and Vera Entwistle, founder of Camp Quality.

**SECRET SKILL**  
“Stubbornness. I’ll keep asking until I get the one ‘yes’ I need.”

## Hive mind

**When Brendan Lonergan took the reins at Beehive Industries, a ‘business with purpose’ that specialises in packaging, assembly and distribution services, things were fairly dire: the social enterprise was bleeding cash and the accountants told him the organisation would be lucky to survive more than a year.**

That was five years ago. Today, annual turnover is up 360 per cent and the not-for-profit supports 250 ‘Beehivers’ who include seniors, those living with disability, and the long-term unemployed. Jobs on the organisation’s factory floor fund meals, activities and support programs for members, including cooking classes and English lessons.

So how did Lonergan do it? “A lot of phone calls, a lot of negotiation and a hell of a lot of meetings,” he laughs.

Lonergan is a natural salesman, a skill he honed over two decades as a co-owner of what became Australia’s biggest music merchandise manufacturer. When he took the job at Beehive, he had two goals:

bigger clients and better training. At that point, most of the work done at Beehive involved folding and sending letters, plus basic packaging and assembly tasks.

“The piece rate for that kind of work is very low, which means you’ve got to do a heck of a lot to make any money at all,” he says. “And if you’re taking up too much production time doing below-value work, you’ll never make a decent return.”

So Lonergan set his sights on more complex jobs requiring computers and software. He approached Telstra and, after much convincing, landed a contract to put together SIM card kits.

“It’s quite technical work but we maintained 100 per cent data integrity,” he says. That relationship, which continues today, helped him get other big firms on board.

All going well, Beehive will be entirely self-funded within the next 12 months. Not only that, Lonergan hopes to expand the organisation’s reach and alleviate social isolation with more online programs, such as the live-stream cooking classes for seniors he currently runs with former MasterChef contestant Kumar Pereira.

### Q & A

**What drew you to law?**

I’m not a person who loves contracts or gets a kick out of jurisprudence. But I love that the law is such an integral part of people’s lives: it’s a protection mechanism, there to make sure we all have access to what we’re entitled to.

**What advice do you have for law graduates?**

Being able to switch off is such an important part of the job. The legal community is getting better at addressing mental health and burnout but we’re not there yet. If we can all start recognising small things we can do to give ourselves a break, then we’re going to be a healthier profession.

**How do you handle the emotional impact of your work?**

It can be very hard. Having an incredible family to go home to is certainly a blessing, but it’s also a reminder of how lucky I am and what the people I work with don’t have.

### Q & A

**You hear the word ‘no’ every day. How do you deal with that?**

Years ago I learned that it’s not me they’re knocking back. They’re just knocking back the proposal, the timing or the fit; not me personally.

**What’s been the biggest challenge you’ve faced at Beehive?**

Because the economy is not rosy, more people are coming to us for help. And it costs a lot each day to support them: we have to staff the place, feed everybody and pay massive bills for insurance and electricity. That money has to come from somewhere.

**What made you switch the business world for the social sector?**

Because I can. I say to people, “If you can help someone and you’ve got the ability, why aren’t you doing it?”



## ANNETTE BENNETT HEALTH AWARD

### UTS DEGREE

Master of Midwifery (Research), 2015

### CURRENT POSITION

Maternal health adviser, scholarship coordinator and Ebola preparedness trainer, Samaritan's Purse

### ROLE MODEL

"My mother. She had to leave school at 15 but went on to complete a Master of Linguistics. She and my father sponsored and supported dozens of refugee families from Vietnam during my teen years."

### SECRET SKILL

"I spent a year studying Amharic, the national language of Ethiopia."

# Delivering safer beginnings

Based in Juba, the capital of South Sudan, midwife and nurse Annette Bennett has a somewhat restricted life: she and her husband live in a compound, they have an 8pm curfew and Bennett isn't allowed to drive.

Having spent 20 years in Africa, she's used to safety precautions, but she admits her present role is the most challenging yet.

Bennett has been upskilling young midwives and onboarding established professionals at a bare-bones hospital in the country's remote north-east, a region prone to instability. While she speaks some Arabic (a legacy of the decade she spent in Egypt, running a clinic for refugees), there are several more languages to contend with in South Sudan, plus a patriarchal society resistant to change. Not to mention the threat of Ebola, which is endemic in neighbouring Democratic Republic of the Congo.

In many ways, Bennett is starting all over again in South Sudan after making significant gains for midwives, and the mothers and newborns in their care, in Ethiopia.

In 2006, as the founding Dean of the Hamlin College of Midwives, she established Ethiopia's first fully accredited, direct-entry Bachelor of Midwifery course. Awarding scholarships to young women in rural areas, she provided hands-on training with plenty of post-graduation support.

In return, students agreed to go back to their home town to work. It was a completely new approach in a country where, at the time, 99 per cent of midwifery students were males from urban areas.

"The government would send these midwives to a remote area, one at a time, with a population of up to 200,000 to care for," says Bennett. "They didn't speak the local language and they weren't accepted by the community. Any pregnant women who did come to the health centre usually did so because they were at death's door."

As a result, many midwives would leave before the end of their contract.

Today, the Hamlin College of Midwives continues to turn out highly skilled professionals. The college does not take in huge cohorts and the number of graduates is modest, but these midwives are leaders in their profession. Some have gone on to complete a master's degree or work as mentors and academics.

Others have transformed healthcare for mothers and newborns in their home towns. In Burrakat in Ethiopia's remote Amhara region, for example, the health centre used to deliver one or two babies a month, says Bennett, and survival rates were dismal.

"Within seven years, our midwives were managing around 900 births a year, with not one maternal mortality."

## Q & A

**What advice do you have for graduates who want to practise abroad?**

If you've never lived in a rural area, go and work in remote Australia and get a few years of experience under your belt. Make sure you're really skilled and employable — we don't want second-best here.

**Was there a moment in your career that changed everything?**

Early on in my time in Ethiopia, I met a young graduate at a remote health centre. She was the only midwife there, and she was burnt out, depressed and knew her skills were inadequate. She said to me, "I didn't even complete a birth on my own before I graduated." That was a game-changer for me. It solidified in my mind that I have a duty of care to my graduates and the women in their care.

**What's one thing you're especially proud of?**

My daughter, Alleytia. She graduated from UTS, worked in the Northern Territory as an emergency nurse and is now nursing in South Sudan. She's doing it hard in a very remote, resource-poor area. I tell her she's gone next-level.



## YIYING LU DESIGN, ARCHITECTURE AND BUILDING AWARD

### UTS DEGREE

Bachelor of Design (Visual Communication), 2008

### CURRENT ROLE

Artrepreneur

### ROLE MODEL

Professor Louise McWhinnie, Dean of UTS's Faculty of Transdisciplinary Innovation. "When I met her, I saw a global soul. We instantly bonded."

### SECRET SKILL

"I'm very entrepreneurial."

# Breaking borders

She's the creative genius behind the dumpling emoji and Twitter's infamous Fail Whale, but there's much more to Yiying Lu's story.

Raised in Shanghai, Lu came to Australia to study design and is now working with tech startups in Silicon Valley. An 'artrepreneur', she's on a mission to bridge cultural divides, from art to tech and East to West.

Between branding work and exhibitions, Lu gives public addresses and runs online classes, teaching creatives how to design for a global audience. She's also working on a picture book, *The Very Hungry Red Panda*.

"People say to me, 'I've finished school, how do I get a job?'" she says. "When I look back, I realise I never actually found a job."

Lu may not have sent out CVs, but she's incredibly good at leveraging social media and monetising her work. By the second year of her degree, she was already licensing her designs to companies such as the Sea Life Sydney Aquarium and one of the world's biggest games corporations.

When Disney opened a resort in Shanghai in 2016, they hired Lu to localise their campaign material. Her take on Mickey, while undeniably Disney, is in the style of a Chinese paper-cut figure, complete with traditional motifs.

"I wanted to do the seemingly impossible: unify something that's so global, but also local. I wanted to find that common voice while keeping what is unique about the location," she says.

From logos to wall stickers, Lu's quirky creations speak to people all over the world. This, she says, is the beauty of being a designer rather than an artist.

"I create for communication's sake," she says. "It's about understanding what the audience wants and what the client wants. I'm a vessel, helping these two things connect. In a lot of art and design, the voice overshadows the subject matter — that's not communication."

## Q & A

**What are you most proud of in your career?**

That there's a community out there that recognises what I do as being meaningful, adding value to people's lives and allowing others to co-create.

**Is there a moment that changed your career?**

When I was studying, I had a job at a dumpling restaurant and it taught me how hard some people work. There was this old lady who'd make shrimp rolls all day. Who knows, if she had the opportunity and education, she might be a better designer than I am. I realised that someone else is always sacrificing their potential to let you do your thing, so there's no reason why you shouldn't work hard.

**What advice do you have for design graduates?**

Travel. Go to Japan, Zimbabwe, China — anywhere you don't speak the language. You'll feel extremely uncomfortable, you'll be forced to be silent and listen, and you'll train your intuition.



## PANDORA SHELLEY

### UTS BUSINESS SCHOOL AWARD

#### UTS DEGREE

Bachelor of Business (Management Consulting and Marketing), 2014

#### PREVIOUS ROLE

CEO, Fishburners

#### ROLE MODEL

Melanie Perkins, founder of online design platform Canva

#### SECRET SKILL

"I'm a hands-dirty kind of leader."

## Growth mindset

**In just eight years, Pandora Shelley went from being the office manager at startup hub Fishburners to company CEO. In that time, she helped the not-for-profit foster the growth of more than 2000 tech businesses, creating more than 2500 jobs and generating over \$110 million in revenue.**

The organisation, which runs co-working spaces and events for entrepreneurs in Sydney, Brisbane and Shanghai, recorded unprecedented growth during her tenure.

And yet, at meetings with external companies, the 28-year-old CEO was often overlooked.

"I got asked to take notes — numerous times," she says. On occasion, she would call out inappropriate behaviour; other times, she'd settle for proving them wrong.

Entering the startup world was a leap of faith for Shelley, who describes herself as risk averse. So much so, she considers her legacy at Fishburners to be a culture of data-driven decision making. "It got to a point that for almost every dollar and every hour we spent on a project, we had data to back it up."

Earlier this year, Shelley took another leap into the unknown, leaving the organisation for New York.

"Honestly, it was the hardest thing I've ever done," she says. "But I was very clear that I would be CEO for one year. When that time was up, I had achieved all the things I'd wanted to achieve."

So what's next? At this stage, she can't say too much — only that she's not done with startups just yet.

## Q & A

**How did you know it was time to leave Fishburners?**

I felt like I wasn't growing at the same pace I once was. I always said that would be the time I moved on.

**What advice do you have for business graduates?**

**Work for a startup. You'll get skills you won't pick up anywhere else, like being innovative, adaptable, coming up with solutions and moving fast. More and more companies are looking for 'intrapreneurs' — people with entrepreneurial skills who want to work for a company.**

**What's something every startup founder should know?**

**A good entrepreneur isn't afraid of failing. The best startups at Fishburners have come from people who've tried four, five, six-plus ideas. It's very rare that the first idea is the right idea.**



## JIM WHITE INTERNATIONAL ALUMNI AWARD

#### UTS DEGREE

Master of Education (Adult Education), 1996

#### CURRENT POSITION

Senior Vice-President of Human Resources, Paramount Pictures

#### ROLE MODEL

"My mother, Florence White. She was a Polish/American immigrant born in 1932. Even with all the challenges she went through, her whole outlook was about helping others."

#### SECRET SKILL

Fitting it all in. "I don't wear a watch. When you don't worry about time, things just happen."

## Behind the scenes

**In 1994, after attending his first lecture at UTS, HR executive and social advocate Jim White was pulled aside by the Dean, who said to him, "Why are you here? I don't mean to offend you, but we don't get many American students here."**

White's reply? "That's exactly why I'm here."

He explains: "I could have applied for Cambridge or gone to Oxford; schools that everybody else goes to. But the fact is UTS has an amazing education program, particularly in terms of diversity and inclusion, and there aren't many Americans who've done it, which means I have very unique, specialised experience."

At the time, White was Vice-President of Human Resources at Blockbuster. He'd been spending time in Australia, assisting with the chain's local rollout.

In some ways, this was a return to the past for the senior executive, who'd worked behind the counter at a 'mom and pop' video store while completing his undergraduate degree in Nebraska in the 1980s.

"I didn't realise it at the time, but I was one of the few people on the planet who really understood video stores," he says.

After agreeing to work for Blockbuster in Australia, White took the opportunity to further his education at UTS.

Some 35 years later, White is still in the entertainment industry. Today, he's Senior Vice-President of Human Resources at Paramount Pictures, where a background in business — "I evolved my HR skills along the way" — makes him a unique hire.

White assists with restructures and sourcing executive talent, but also acts as a business counsellor, helping senior executives make operational decisions.

The role at Paramount brought him to Los Angeles and, in turn, set him on a mission to combat homelessness.

"I actually ended up living near Skid Row, an area of extreme poverty," he says. "When I went out in the evening for the first time, there were roughly 2000 people sleeping on the street."

Today, he represents the entertainment industry on the Business Leaders Task Force, a group that works with various sectors to come up with housing solutions. Over the past decade, it's helped house thousands of LA residents.

White sits on several boards and undertakes pro bono HR work, but he says the task force, with its unique take on poverty, has been the most effective.

"We look at how homelessness impacts businesses from a monetary perspective," he says. "We're not saying the humanitarian part isn't important, but we're getting business leaders to understand that, as taxpayers, we pay for this anyway — and the way we're currently spending that money isn't smart."

## Q & A

**What's your best career advice?**

I tell people, "Only do the things you love." If that's the only thing you look for, you'll always be happy in your job, your life and everything else.

**What's one of the biggest challenges you've faced in your career?**

Being able to communicate with people who are US-centric just how big, amazing and diverse the world is. People can be myopic in their thinking about the world, their job and their lives.

**Looking back, what advice would you give your younger self?**

I didn't fully understand the potential of the skills I'd obtained at the video store. Everything we do in life is important, and we never know how what we're learning today will be valuable in the future.

# Ahead of the game

**The business landscape and the nature of work are evolving rapidly, and employee skills are becoming outdated faster than ever before. The new UTS Futures Academy has been specifically designed to help workers and employers stay ahead.**

Deloitte Australia has reported that two out of three jobs will be soft skills-intensive by 2030, as artificial intelligence and automation continue to reshape the nature of work.

For enterprises, and for individuals, the challenge – and the opportunity – is to keep skills and knowledge up-to-date and relevant. Businesses will need their people to reskill or upskill to enhance adaptability and creativity, improve digital literacy and problem-solving skills, and be able to identify and address risk. Employees will need to ensure their knowledge and skills remain appealing in present and future job markets.

## **The UTS Futures Academy**

The rapidly changing global workplace demands a new kind of learning that is personalised, passion-driven, flexible and future-focused.

The UTS Futures Academy is addressing this need by working with businesses to identify the existing capabilities of staff, and using AI-driven analysis to map these against job requirements to identify strengths and gaps. It then delivers customised programs to future-proof individuals and organisations.

The Academy is led by Founding Director, Distinguished Professor Robert (Bob) Wood, a world-renowned expert in organisational psychology and leadership, complemented with an array of

UTS experts in analytics and data science, architecture, business, communications, education, engineering, entrepreneurship, health, IT, law, science and transdisciplinary innovation.

## **Personalised learning in action**

Imagine a career accountant who wants to learn more about AI. After completing a skills audit with the Futures Academy, they could do an online course in AI applications from the Faculty of Engineering; a philosophy course on the ethics of AI; or management and AI-related law courses from the Faculty of Law. If they wanted to bundle these ‘stackable’ courses into a diploma or masters, they could add courses on team leadership, history, communications, or change management.

The global Futures Academy ecosystem means these courses can be studied at UTS, or through a worldwide network of leading learning providers and corporate partners.

Providing the freedom to create a bespoke and ongoing educational experience means employees will be able to change and adapt as the demands of their work evolve.

As one Futures Academy client commented, “The focus has always been on preparing people to fit into organisations, but the future will be about helping people create new pathways for themselves and shape organisations to maximise their contributions.”

For more information about the UTS Futures Academy, tailored courses, public talks, taster courses and master classes, please contact **+61 2 9514 3504** or [utsfuturesacademy@uts.edu.au](mailto:utsfuturesacademy@uts.edu.au) or visit [UTSFuturesAcademy.com.au](http://UTSFuturesAcademy.com.au)



## **Innovative Galuwa Program scales new heights**

**Galuwa means ‘to climb’ in Gadigal language and that’s exactly what UTS wants Aboriginal and Torres Strait Islander high school students to do.**

The UTS Faculties of Business and Law, with the generous support of philanthropists, will launch the 2019 Galuwa Business and Law Program in September 2019.

The program will offer over 30 Indigenous high school students from Years 9 to 11 the chance to experience university life, broaden their knowledge of professional options, and grow their understanding of the higher education opportunities available to them.

The Galuwa Program has already been delivered with great success in the UTS Faculties of Health, Engineering and IT, and Design, Architecture and Building.

The Galuwa Business and Law Program will consist of a five-day residential program, giving the Indigenous students a bespoke university experience aligned with their career and education aspirations. The program will include a mix of critical thinking

**“The program will offer over 30 Indigenous high school students from Years 9 to 11 the chance to experience university life.”**

and communications workshops; cultural activities; and presentations and mentoring from inspirational and successful professionals. It will culminate in a Program Graduation Dinner for the students.

Galuwa is an integral component of the overarching UTS Indigenous Strategy, ensuring that young Indigenous people can engage in university life, meet industry partners, experience commercial workplaces, expand their horizons and raise their aspirations for education.

To learn more about Galuwa and how you can support the program, contact the Jumbunna Institute for Indigenous Education and Research on **1800 064 312** or [atsirecruitment@uts.edu.au](mailto:atsirecruitment@uts.edu.au)

# The power of values-driven leadership

**Violet Roumeliotis is the CEO of community organisation and social business Settlement Services International (SSI), a Telstra Australia Business Woman of the Year and a UTS alumna. Earlier this year, she delivered an inspiring speech to graduating students on the importance of empathy and compassion in business. This is an edited version of her speech.**

Whether you're at the beginning of your career, or starting a new phase in it, this is a time to consider what you believe in.

For me, one of my core values is social justice. This was borne from watching my parents arrive in a new country from post-World War II Greece and try to rebuild their lives.

At that time, Australia did not have organisations like SSI to help newcomers. There was no support to learn English, to connect to the wider Australian community, to pursue study or employment goals. Nonetheless, my parents rose above those challenges

to carve out a life here for themselves.

My parents' experience instilled in me a deep belief that every person should have the right to achieve their full potential – to live the life they choose and to be treated fairly and with dignity.

My career to date has taught me that it is imperative for leaders to maintain strong values and keep them at the heart of their decision making.

In 2012, when I joined SSI, we had one main source of funding and 68 staff members. I realised that without diversification, we wouldn't have a future; we simply weren't sustainable.



But that didn't mean I was going to play hardball and go after new funding sources with no thought to my values or the cost to others.

It meant finding new ways to safeguard SSI's funding that would also increase our social impact and strengthen our sector.

One way we did this was by forming consortiums with other community organisations and tendering for work. We engaged in non-predatory growth, whereby we grew the pie of available funding for our peers, as well as ourselves.


We also established income-generating social enterprises such as Humble Creatives, which sells candles and home crafts while offering work experience opportunities to people experiencing unemployment.

Before embarking on that growth program, SSI was a Sydney-based organisation with fewer than 70 staff and revenue of \$9.4 million. Today, our operations span the entire east coast of Australia. We have a workforce of 1000 and revenue of \$115 million.

I share this example with you today to demonstrate that values-driven leadership can go hand in hand with a commercial, growth-oriented business mindset.

It's simply not true that you have to compromise your values to succeed as a business leader. Did you know that in 2006 an economist was awarded the Nobel Peace Prize? Muhammad Yunus, a Bangladeshi banker and economist, realised the role microfinancing could play in helping families, and ultimately whole communities, break the cycle of poverty.

This example highlights the power each of us has. Your actions have a ripple effect and you can create real change just by incorporating your values into your daily work life.

Social impact is our shared right – and responsibility. Whether you're in government, civil society or business, we all have a role to play. It is your right and privilege to use your beliefs, principles and values to carve out the legacy you wish to leave in this world. 



## Determined to learn

**Mujibur Rahman's dreams of becoming a doctor were shattered when he and his family were forced to flee from conflict in Myanmar. But today, Rahman is realising his dreams after becoming the first UTS Humanitarian Scholarship recipient to graduate. This is his story.**

Before all the violence, Myanmar was a peaceful country. We could go to school. We could have fun with our friends. It was back then that I decided I wanted to be a doctor.

The violence just came up from nowhere. An extremist group started attacking mosques and threatening Muslim students. One day I couldn't go to uni because they said, "If you go on that day we will kill you."

My two younger brothers and big sister were also terrified. My brothers were just nine and 13. My sister stayed at home because she wears a burqa and they told us, "If anyone wears a burqa, or a Muslim hat, we will throw acid at them."

Everyone was scared to go out.

I couldn't do my first semester of uni and my father couldn't go to his shop. I had to stay up late at night just to guard my house. That's when my dad decided to come here.

I felt devastated. I knew I could achieve my goal of becoming a doctor, but I couldn't stay because it wasn't safe. It was a really sad moment for me.

We fled to the coast and someone told us to get in this boat. It was really risky. I spent about four days in the ocean and I thought I would die because I didn't eat or drink anything. There were big waves and the boat was moving a lot. We also had a hole in the boat, so the water started to come in. It was like a nightmare.

When we arrived at Christmas Island I thanked God I'm alive! I promised my dad and mum that I would achieve my goal and make them proud.


But my dad had a heart attack and passed away hours after we arrived. Five weeks later, my family arrived in Sydney with Dad's body to bury.

I was determined to keep my promise to my father to study



medicine. In Sydney, I went to intensive English classes for six months and then into Year 11 and my HSC. In the end, I got into both UTS and the University of Sydney with a full scholarship. I was so happy!

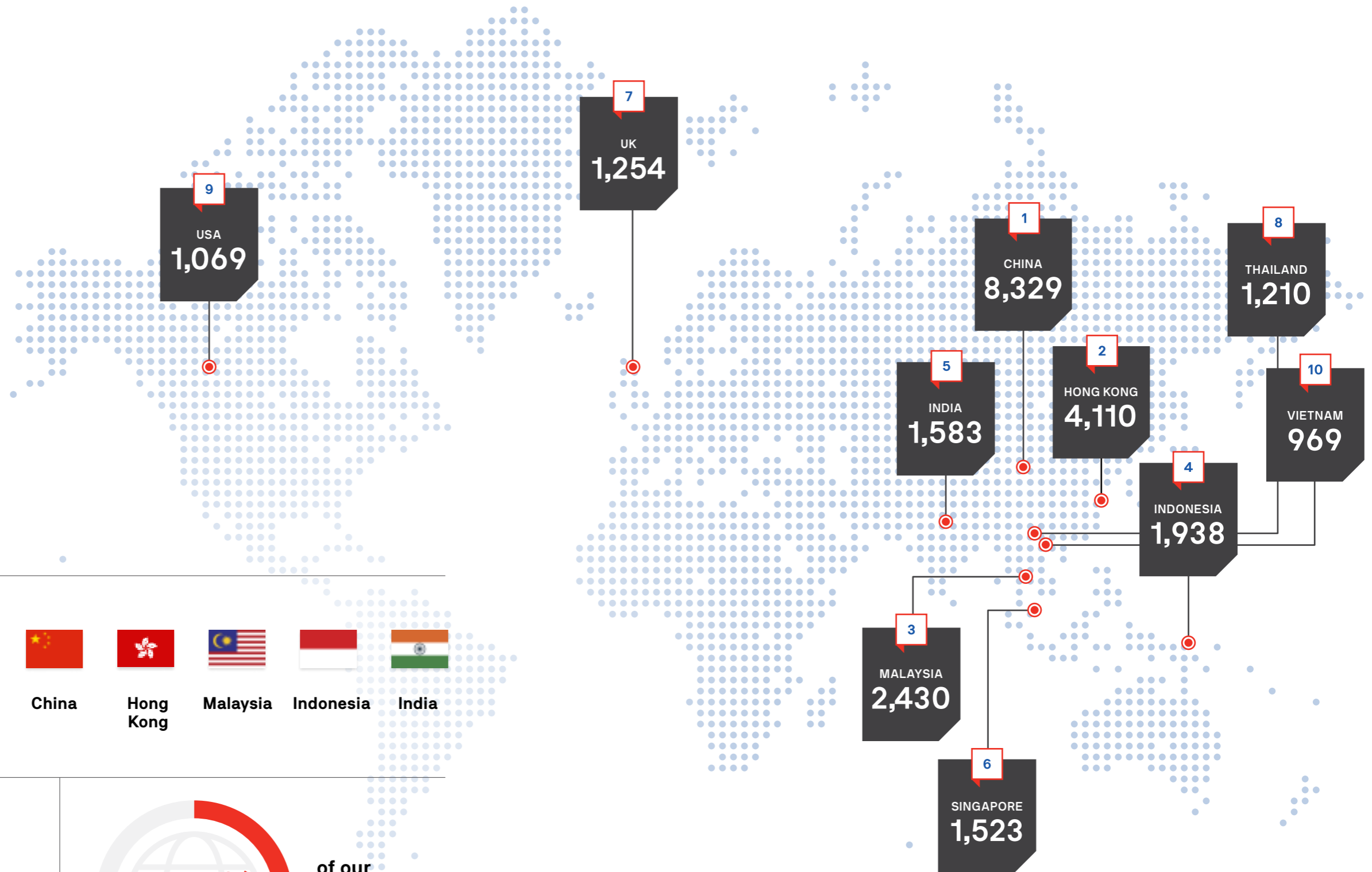
I chose nursing at UTS because of their support. I've used counselling, English language support programs, peer coaching and the careers service. From my second year, I was doing a nursing placement and had no time to work. So the financial support from UTS was especially important. I couldn't have survived without it.

In 2018, I graduated with a Bachelor of Nursing. Now I'm looking for a job as a registered nurse and studying for the entrance exam for medicine. It will be hard to get in because I'm on a Temporary Protection Visa but I haven't given up hope. I've come so far already and I know if I keep trying my best, I will keep the promise I made to my father. 

Learn more about the Humanitarian Scholarship and other ways UTS supports students like Mujibur at [uts.edu.au/humanitarian-access](https://uts.edu.au/humanitarian-access)

# World class

From Shanghai to San Francisco, UTS alumni are making their mark all over the world. We are very proud of these dynamic graduates, who are continuously growing our global impact as they contribute to their various fields. With our alumni at the forefront, it's no wonder that UTS's international profile is going from strength to strength.



**TOP 5**

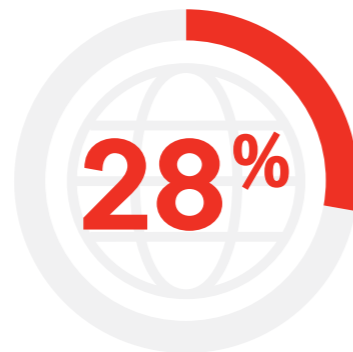
countries for our international alumni



UTS has more than

**29,158**

alumni living and working in 138 countries



of our overseas graduates are based in China

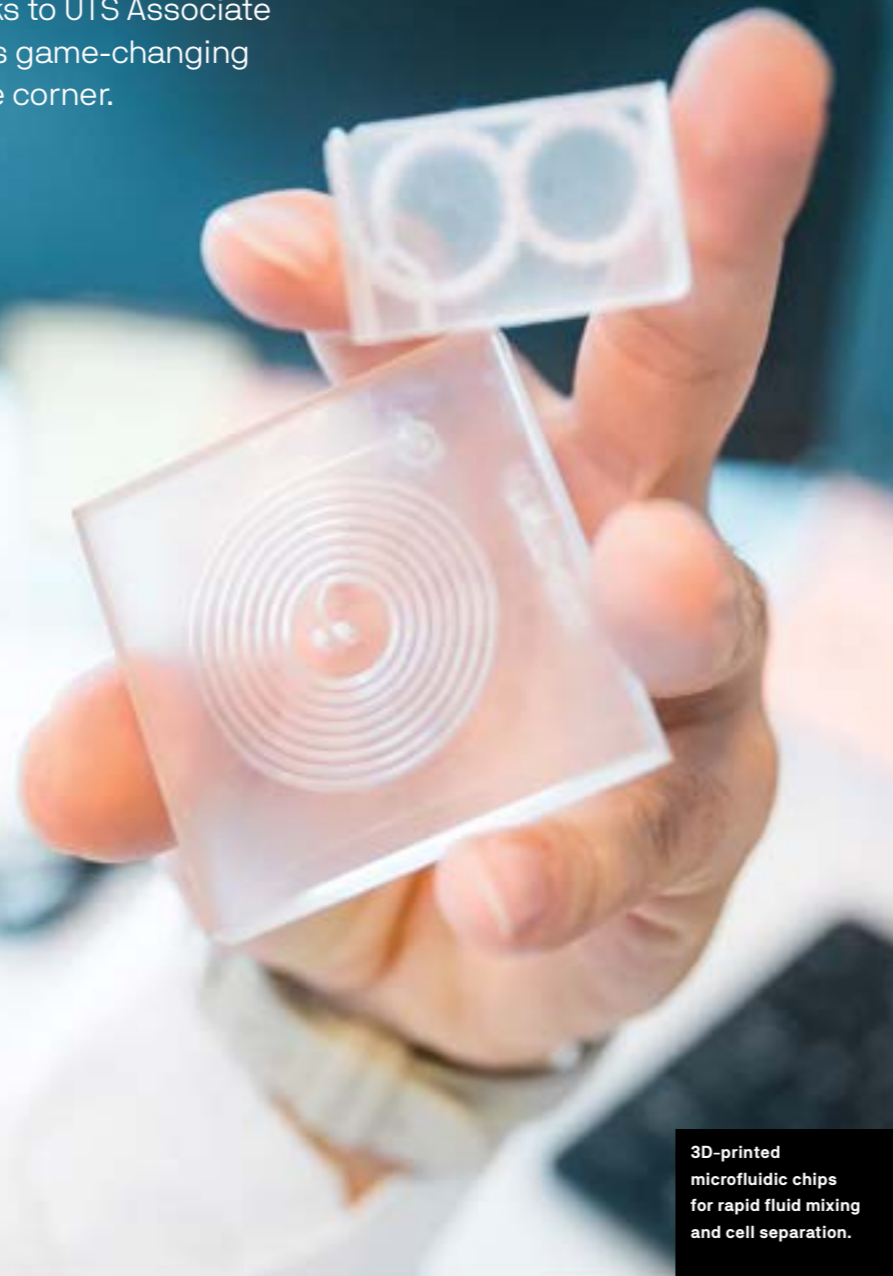
Connect with your fellow graduates wherever you are in the world! Update your education details on LinkedIn and visit [alumni.uts.edu.au/connect/networks](http://alumni.uts.edu.au/connect/networks) to find your local alumni network and details about upcoming events.

# The cell separator

Imagine if cardiovascular disease could be diagnosed in your doctor's office with a quick blood test using a biochip. Or if there was a machine that could clean your blood of cancerous cells, improving your chances of beating the disease. It may sound like science fiction, but thanks to UTS Associate Professor Majid Warkiani, this game-changing technology is just around the corner.

Through his innovative work into cell separation, Majid Warkiani has developed a diagnostic biochip that can separate cancerous cells from normal blood cells. Already in use in many research centres around the world, the biochip could lead to more affordable early diagnoses of cancer.

The same cell sorting technology could also transform how cancer is treated. Warkiani is working on a cancer dialysis system that can filter cancer cells out of a person's blood, making the disease easier to treat and minimising the effects of chemotherapy.



3D-printed microfluidic chips for rapid fluid mixing and cell separation.

**“We are working on real-world problems and the technology is useful and patient-oriented. It can change the life of people who are diagnosed with cancer or other diseases.”**

Majid Warkiani

Warkiani says his research is a natural fit for a mechanical engineer who originally wanted to be a doctor.

“I'm somewhere in the middle of engineering and medicine, which I really like. I understand the language of clinicians as well as the language of engineers.”

Warkiani has been learning both languages since graduating from university in his home of Iran. As a doctoral student in Singapore, he explored how nanotechnology could improve water technology and quickly saw the wider potential of his research.

“We were creating tools to identify bacteria in water and I started to get exposed to the world of micro-filtration. I realised how much application you can find for these things.”

After completing his PhD, Warkiani moved to the Massachusetts Institute of Technology (MIT) in the US, where he worked closely with biologists and clinicians, applying his micro-filtration techniques to sort cells in cancer research.

This work reinforced Warkiani's passion for the medical realm. And in mid-2017, after a brief stint at the University of New South Wales, Warkiani moved his research and team to UTS's new School of



Biomedical Engineering.

“UTS gave me the freedom to build the laboratory that I want with all the equipment that I need, which was great. So now we have a world-class laboratory with all the necessary tools, and we are close to the biologists and scientists in the Faculty of Science, so we can jump across there and collaborate.”

Warkiani believes this collaborative approach is key to improving how we prevent diseases.

“The big problems like cancer, like cardiovascular disease; these are not the type of problems that one set of skills can solve. We will only tackle the problems if scientists, engineers and biologists talk to each other and chip in from different perspectives.”

At UTS, Warkiani is working alongside a number of teams to refine the cancer dialysis system that saw MIT Technology Review name him as one of their Top 10 Innovators under 35 in the Asia-Pacific in 2016.

He's also developing microscale tumour models ('tumour-on-a-chip') that will one day eliminate the need to test drugs on animals.

But Warkiani's research has exciting possibilities well beyond cancer treatment. He's brought his cell separation technique to algal research in the Faculty of Science,

and is collaborating with peers in Adelaide to use the system in pre-natal screening for genetic disorders. He's also separating stem cells to better understand their therapeutic potential in collaboration with Regeneus Ltd, a local biotech company in Sydney.

“There are so many opportunities, because all diseases come back to the cells — either a bacterial infection, a viral infection or cell-related abnormalities. Then it just requires a mechanism to separate them.”

In a novel partnership, Warkiani and his team are even helping Coopers improve the quality and taste of its beer. The brewery has used Warkiani's technology to create an in-line system that separates out pathogens in their yeast tanks.

There is still a way to go before his research can be translated into everyday medical treatments, but Warkiani says he remains driven knowing that his work will make a powerful difference for people.

“We are working on real-world problems and the technology is useful and patient-oriented. It can change the life of people who are diagnosed with cancer or other diseases.”





# The gift of a safer society

**From solving cold cases to preventing future crimes, the Bulgin Fund is helping the UTS Centre for Forensic Science make a bigger impact for society.**

Imagine if a person's facial characteristics could be constructed from a DNA sample. Or if there was a method to detect both DNA and fingerprints at the same time.

These are just some of the exciting advances being explored at UTS's Centre for Forensic Science, which has been at the forefront of forensic science research since it opened in 2004.

Its work is now getting a welcome boost, thanks to a bequest from the estate of Peter John Bulgin. The Bulgin Fund provides for staff and materials, allowing the centre to keep up the groundbreaking research that is shaping everything

from disaster recovery to law enforcement.

Director of the Centre, Professor Claude Roux, said the Bulgin Fund has been vital for his team because "it's difficult to attract systemic funding in forensic science".

The extra funding is helping Professor Roux and his team pursue their research into 'traces': DNA, fingerprints and other identity clues such as card transactions and surveillance footage. Traces make it easier to reconstruct events



and identify suspects in murder investigations and other criminal cases.

Roux says this is also one of the research areas informing "how we could better prevent security concerns and crime", from malicious cyberattacks to terrorist acts and 'traditional' street crime.

The Bulgin Fund has also supported Post-Doctoral Research Fellow Dr Mark Barash in a project that could help identify disaster victims or missing persons. Dr Barash now has the essential software and lab chemicals he needs to explore how a person's DNA sample can be used to generate a picture of what they look like.

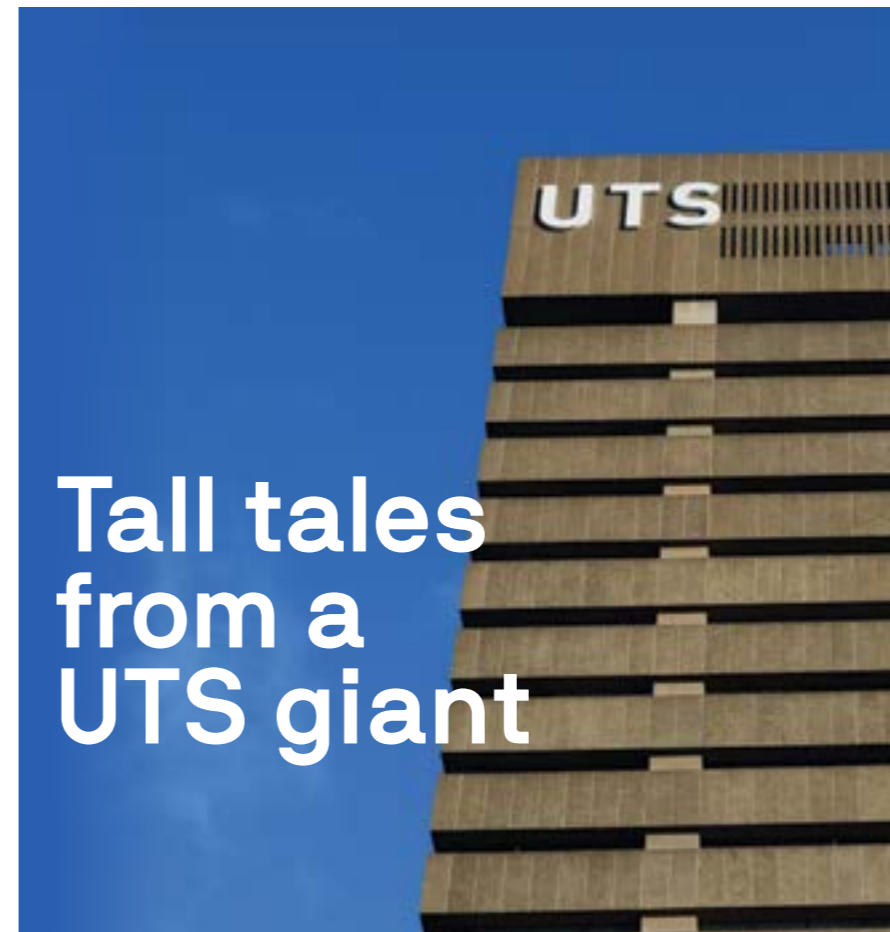
Under the fund, the centre was able to hire forensic science lecturer Dr Sebastien Moret to develop next-generation fingerprint detection techniques from nanoparticles. And a PhD student could complete their study into methods that simultaneously detect DNA and fingerprints, which will massively reduce lab work.

Another researcher who has been able to advance her work under the Bulgin Fund is forensic taphonomist Dr Maiken Ueland. She studies decomposition at the UTS AFTER facility, and her biomarker findings are helping to determine a more accurate time of death, and whether a body has been moved from another location.

Over a decade, Professor Roux has seen the centre grow from one undergraduate forensic science program into a world research leader that also provides exceptional courses to students.

"Without funding, we wouldn't have the means to organise realistic, practical tutorials, or even do the research in the first place. The Bulgin Fund is absolutely pivotal for UTS."

For a confidential conversation about leaving a gift in your will or other philanthropic opportunities at UTS, please contact the Advancement team on +61 2 9514 9861 or [advancement@uts.edu.au](mailto:advancement@uts.edu.au)



Did you have classes in the unmissable Tower building? The Tower has divided opinion, inspired myths and dominated the Sydney skyline from the start. Now our Brutalist icon is getting ready to celebrate its 40th birthday.

It took eight years to build, but when the Tower officially opened on 15 October 1979, not everyone was a fan. Standing 120 metres tall and unashamedly Brutalist (from the French *béton brut*, meaning 'raw concrete') in style, the building was declared by some to be an eyesore.

There was a joke that UTS stood for 'ugliest tower in Sydney', and

another that the building was giving Sydney the middle finger.

The university's first Vice-Chancellor Gus Guthrie drily said, "We have a tower, but no one could claim it's an ivory one."

If the original plan had gone ahead, there would have actually been seven tower-like buildings on the Broadway site. That number was cut back to three, and for financial reasons, only one-and-a-half were completed. The half was demolished a few years ago to make way for a reimagined Building 2 (UTS Central).

Love it or hate it, the Tower has inspired its fair share of stories. One urban myth is that its high-set windows were designed so students weren't distracted by the panoramic city views during class. In fact, the high windows were a requirement for the wall-mounted engineering equipment housed in the Tower at the time.



Another story that lingers on decades after the Cold War is that a nuclear fall-out bunker was built into the Tower's basement. While there is no evidence of this, excavations for the UTS Central project did uncover a pit unmarked on any plan.

Despite its singularity, or perhaps because of it, over time the Tower has captured imaginations and hearts. It has been celebrated in snow globes, as millinery and against Instagram-perfect blue skies on social media.

In recent years, four striking new buildings have been built under the City Campus Master Plan, including the newly-opened UTS Central.

But at 40 years young, the imposing UTS Tower still carries the soul of our reimagined campus. And it begs the question: what stories will the UTS Tower have to tell in the next 40 years? 🗣️



# Building for tomorrow

**Global engineering and construction group Salini Impregilo has formalised its partnership with UTS through the Australia Tomorrow's Builders Scholarship.**

Pietro Salini, CEO of Salini Impregilo, is unequivocal about the importance of nurturing emerging leaders in the engineering and construction sectors.

"Investing to attract young talent is essential for creating a long-term vision for the company. In the last three years, 40 per cent of the 25,000 people we have hired are under 30 years of age."

As part of a strategy to bolster Australia's infrastructure growth, the Australia Tomorrow's Builders Scholarship funded by Salini

Impregilo will support students from UTS's Faculty of Engineering and IT and the Faculty of Design, Architecture and Building who have a special interest in construction.

A global leader in complex infrastructure projects such as hydroelectric plants, metro systems, airports, motorways and industrial buildings, Salini Impregilo is also committed to creating sustainable solutions that promote growth and innovation, while investing in future generations.

While expanding its Australian presence with projects such as the Australian hydroelectric project Snowy 2.0, Perth's Forrestfield-Airport Link and part of Sydney's Metro Northwest, Salini Impregilo

entered into partnership with UTS in late 2018.

"We are keen to support UTS students through a long-term scholarship program, while also encouraging the participation of women in the engineering sector with the university's Women in Engineering program," says Marco Assorati, Salini Impregilo Executive Director Asia Pacific.

"We would also like to promote public debate around the future of Australia's infrastructure with a focus on new technologies, the environment and sustainability."

In November 2018, Salini Impregilo and UTS co-hosted the launch of a report called 'Flexible Cities: The future of Australian Infrastructure'. Produced by the Economist Intelligence Unit and Salini Impregilo with input from UTS academics, the report advocated for smarter, more adaptive infrastructure that can serve Australia's rapidly growing urban populations.

It also highlighted the need for greater investment in STEM education to address the nationwide skills shortage. The Australia Tomorrow's Builders Scholarship will help tackle this problem, with two UTS students a year awarded \$10,000 and the opportunity to do a paid internship with Salini Impregilo. The scholarship will run until 2023.

The Dean of UTS's Faculty of Design, Architecture and Building, Professor Elizabeth Mossop, says the wider partnership with Salini Impregilo will also include events and research to foster debate on public infrastructure development.

"We are very keen to collaborate with Salini Impregilo in research and education for the development of intelligent infrastructure for Australian cities." 🗣️

# Entrepreneurs for good

From a robotic rehabilitation company to an online service for diabetes sufferers, many UTS Startups are focused on making a positive difference for society.



Tech Gym's Thirunisha Thirumuragan and Rowan Smith.

A few years ago, UTS student Rowan Smith realised his grandmother wasn't getting the rehabilitation she needed after having a stroke. So with fellow student Thirunisha Thirumuragan he co-founded Tech Gym: a robotic arm that helps stroke patients through their rehabilitation exercises.

His invention won him first prize and \$12,000 in this year's IBISWorld 3P Innovation Competition. And it's set to make a huge difference for people like

his grandmother, and their therapists, in the future.

"Our device improves how many stroke patients a hospital can serve in a day and automates the reporting process to reduce time spent on paperwork. We include games and music therapy to create a fun and immersive environment for patients, which helps their motivation," Smith says.

Now in his final year of a mechanical and mechatronic engineering degree, Smith says he is ecstatic about his win, which will speed up the research and development for Tech Gym.

Another UTS entrepreneur focused on improving people's lives is Lucy Allen. She was diagnosed with type 1 diabetes (t1d) as a child, but struggled with the lack of support for the illness as she grew up.

"There's no success when it comes to t1d. It's a constant balance of keeping your blood sugar levels within range. While I enjoyed comprehensive care as a child, that level of support falls away as you get older," she explains.

During a subject in her Bachelor of Creative Intelligence and Innovation at UTS, Allen decided to create an online solution of her own. She and two friends from her degree, Polina Pashkov and Eliza Marks, then continued to develop the idea through UTS Startups after they graduated.

In mid-2018, they launched Stitch Hub — Australia's first online platform that curates and personalises support

resources for people living with t1d.

"Stitch Hub is essentially a one-stop shop that offers information on everything from support groups, to products to clinicians, so people have a choice in how they manage their illness. Users and the t1d community tell us that they feel like someone is finally building something for them."

Health innovations aren't the only way that UTS Startups are making the world better. UTS Business alumna, Vanouhi Nazarian, created Kindershare to help parents earn extra income and reduce waste by renting out their under-used baby equipment.

Then there's Ruff Sleepers, a not-for-profit pet washing service for homeless people. As well as helping people who are sleeping rough to care for their four-legged best friends, founders Dr Bronwen Dalton, Tully Rosen and Linda Castellazzi are pushing for reforms in how we approach homelessness and crisis accommodation.

Like many in the UTS Startups community, Castellazzi says she's driven by being able to help others.

"What inspires me is the smile of a person who accepts our help and the support of people who believe in Ruff Sleepers and want to give us the means to help more people and pets." 🐾

Stitch Hub co-founders Lucy Allen, Polina Pashkov and Eliza Marks.



UTS Startups is a community dedicated to supporting student-founded ventures. For more information, visit [startups.uts.edu.au](http://startups.uts.edu.au)

# Network like a natural

WORDS BY CANDY JENKINS,  
UTS POSTGRADUATE CAREER COACH

Did you know that only about 20 per cent of jobs are advertised? The rest are filled through internal promotions and referrals. Basically — networking! Talking to strangers might not top your list of fun activities, but it's a crucial skill for building your professional relationships and opportunities. So here are four tips for networking well (even if you're an introvert).

## 1. Turn up

Netflix might beckon, but you won't meet new people sitting at home. If you feel nervous about going to a networking event, try setting yourself a goal. For example, aim to speak to three new people before you leave, or to stay for at least 30 minutes before slipping away. You could also ask a friend, colleague or family member to be your networking partner. Having someone familiar by your side can boost your confidence and make talking to strangers feel a lot less daunting.

## 2. Introduce yourself

You are all there for the same reason and people will feel grateful if you start the conversation. It can be as simple as walking up to someone on their own and saying, "Hello, how are you?" Or try positioning yourself where it's easy to strike up small talk — like the drinks table.

## 3. Remember, it's not a sales pitch

Networking isn't that different to meeting new people at a party. You build relationships not by launching into a rehearsed blurb about yourself, but by asking questions and showing genuine interest in the other person. Ask how they got into their line of work or study and what they like or find challenging about it. If it feels appropriate, ask more personal questions about their lives and families. Once you've built a natural rapport with someone, it will be much easier for you to talk about yourself and your passions.

## 4. Follow up

If you've had a good conversation with someone, ask if they'd be happy to connect on LinkedIn. In your invitation, flag how you met and what you talked about to jog their memory. For example, "I was the one who was jealous of your Bali holiday!" If there is a clear link with where you want to go professionally, be bold. You might ask, "Who would you recommend I talk to about working at your company?" Some connections might not lead anywhere, but others can result in job opportunities, greater industry knowledge, and wonderful new mentors and friends. 📧

For more career tips, make sure you're signed up to our bi-monthly alumni e-newsletter. Update your contact details at [alumni.uts.edu.au/connect](http://alumni.uts.edu.au/connect)



## Photo finish

Graduation is a day for cap tosses, tears of pride, and celebrating years of hard work and sacrifice. If you're a new graduate — congratulations and a huge welcome to our UTS alumni community. Take a look at these photos from our Autumn graduation, which capture the joy and excitement of this big milestone.



#UTSAumni



# Your legacy can be a game changer

When you leave UTS a gift in your will, you can help :

- Transform human health
- Protect our natural world

- Create a more just society
- Nurture tomorrow's innovators

Across the university, we are taking on the world's most urgent challenges and breaking new ground. We invite you to join us with a lasting gift that will drive powerful, positive change for future generations.

To learn more about the impact you can make, please call UTS Advancement on +61 2 9514 9861 for a confidential conversation.



# Start small. Dream big.

UTS Insearch transforms the lives of over 5,000 students from 75 different countries every year, helping them develop skills, confidence and credentials to prepare them for university.

With small class sizes, personalised support and practical learning, UTS Insearch helps students thrive at university – and make their mark on the world as UTS alumni.

“

**UTS Insearch don't just teach you subjects. They also focus on building up your critical thinking and collaboration skills.**

**Aryabimo Harfiandi from Indonesia,**  
IT alumni and Head of Program  
Marketing and Portfolio Management  
at Axiata

”

